

Answering reviews

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 31628

Manuscript Type: BASIC STUDY

Reviewer 1:

Comments To Authors

The authors investigated the acute toxicity, the phytochemical profile, the antidiarrheal activity and the mechanisms of action of *M. erythroxylon* ethanol extract (EtOHE-Me), and demonstrated that the antidiarrheal effect of it involves antimotility and antisecretory mechanisms. The present study was well organized and well investigated. There are some issues that should be addressed prior to the publication in "World Journal of Gastroenterology" 1. In this manuscript, the authors showed the effects of EtOHE-Me on both intestinal transit and gastric emptying. Some abdominal symptoms such as postprandial distress are thought to associate with delayed gastric emptying. How do you think about this point in the case of clinical application of EtOHE-Me ? 2. The authors concluded that the mechanisms of the antidiarrheal effects of EtOHE-Me may be attributed to the chemical compounds, mainly the terpens. However, these points are not described in discussion. The authors should mention these points in discussion. 3. The statistical results should be described even if in the case of not significant. I think it is better to insert "N.S." in Table 2, Table 3 and Table 4.

We have carefully considered the suggestions by the reviewer and we fully agree with the opinions.

Point-by-Point Response to Reviewer

1) In this manuscript, the authors showed the effects of EtOHE-Me on both intestinal transit and gastric emptying. Some abdominal

symptoms such as postprandial distress are thought to associate with delayed gastric emptying. How do you think about this point in the case of clinical application of EtOHE-Me?

More information on the results of intestinal transit and gastric emptying evaluation was added in the discussion, corroborating with data from the literature (pag. 15):

“Similar results were found for a flavonoid rich fraction of *Maytenus ilicifolia* Reissek, which was able to inhibit the intestinal transit in a more potent way than the gastric emptying^[8]. Those results suggest the presence of different mechanisms of action in the different segments of the gastrointestinal system, being probably not linked to gastric disfunction, since *Maytenus* species are well known for enhancing the protective effects of the stomach, preserving its normal physiology^[3-7].”

2) The authors concluded that the mechanisms of the antidiarrheal effects of EtOHE-Me may be attributed to the chemical compounds, mainly the terpens. However, these points are not described in discussion. The authors should mention these points in discussion.

Part of the last paragraph from discussion (pag. 16) was also supplemented, since it's not possible to attribute the activities found in the present study to a single extract compound:

“Those results must be closely related to the secondary metabolites found in the extract: saponins, flavonoids, tannins, triterpenes and steroids”.

3) The statistical results should be described even if in the case of not significant. I think it is better to insert “N.S.” in Table 2, Table 3 and Table 4.

It was inserted the statistical data in the Table 2, Table 3 and Table 4 for the results that were not significant (“N.S.”).

The manuscript was edited by the authors and it was certified by an english native speaker.

The modifications requested by the editor were all performed.

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